



Kansas Medical Assistance Program: Fee-For-Service Program Assessment State Fiscal Year 2019

Prepared by Health Information Designs, LLC
Ariane Casey, PharmD

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Introduction

This *Program Assessment* report prepared for the Kansas Medical Assistance Program (KMAP) provides analysis of trends in drug utilization for KMAP in State Fiscal Year (SFY) 2019. Included in the analysis are the overall drug claims and expenditures as well as claims and expenditures broken down by program type and therapeutic drug class.

This goal of this analysis is to identify where changes in utilization and expenditures occurred during SFY 2019 to help KMAP identify areas in which fee-for-service (FFS) management and interventions may be useful. However, trending this data has become challenging since the implementation of KanCare, due to a host of factors such as the small FFS population, high variability between FFS coverage plans, and 340B pricing and third-party payer payments which lowers actual cost. As such, this report focuses on the variable cost per claim per user to provide an overview of costs within the plans.

Claims Totals

SFY 2019 includes FFS beneficiaries enrolled in the AIDS Drug Assistance Program (ADAPD), MediKan (MKN), and Title 19 Medicaid (TXIX).

Table 1 contains the FFS summary of totals for SFY 2019 (July 1, 2018–June 30, 2019) compared to SFY 2018, SFY 2017, SFY 2016 and SFY 2015.

	SFY 2019	SFY 2018	SFY 2017	SFY 2016	SFY 2015
Total Expenditures	\$13,284,851	\$12,992,968	\$10,391,867	\$8,096,516	\$9,911,032
Total Claims	52,178	57,611	52,518	45,358	47,098
Total Members	20,002	34,505	19,098	33,464	11,193
Total Users	2,745	2,827	2,842	1,729	2,428
Cost Per Member	\$664	\$377	\$544	\$242	\$886
Cost Per User	\$4,840	\$4,596	\$3,657	\$4,682	\$4,082
Cost Per Claim	\$255	\$225	\$198	\$178	\$210

Table 1: FFS Program Summary for SFY 2019 Compared to SFY 2018, SFY 2017, SFY 2016, and SFY 2015

For dates of service from July 1, 2018 through June 30, 2019 (SFY 2019), KMAP paid over 50,000 prescription claims for FFS members and over \$13 million (rebates not included for TXIX and ADAPD) to retail pharmacies for KMAP prescriptions. Compared to SFY 2018, there was a 2.2% increase in total expenditures and 9.4% decrease in total claims, while total users decreased 2.9%. The cost per claim increased by \$30 per claim (13.3%).

Overall Program Totals

Several member eligibility types remain in FFS. The three main types with pharmacy coverage include Title 19 (TXIX), MediKan (MKN), and AIDS Drug Assistance Program (ADAPD).

FFS Program Types

TXIX, or Medicaid, is the health insurance program that helps low income people pay for health services including preventative, primary, and acute health services for individuals, children, and families.

Note: Most TXIX beneficiaries are assigned to one of the KanCare (KC) MCOs, but specific system-designed logic exists that will exclude a beneficiary from being assigned to an MCO completely or for a particular time period. Exclusions are typically related to the type of eligibility, living arrangement type, or timing of retroactive eligibility.

MKN is the state-funded health insurance program for adults 18 years or older and covers fewer services than Medicaid.

ADAPD is the program that covers the cost of medications dispensed by a retail pharmacy for those enrolled individuals who have AIDS or are HIV positive.

Figure 1 shows the number of users, claims, and claims cost for all of FFS by month for SFY 2019.

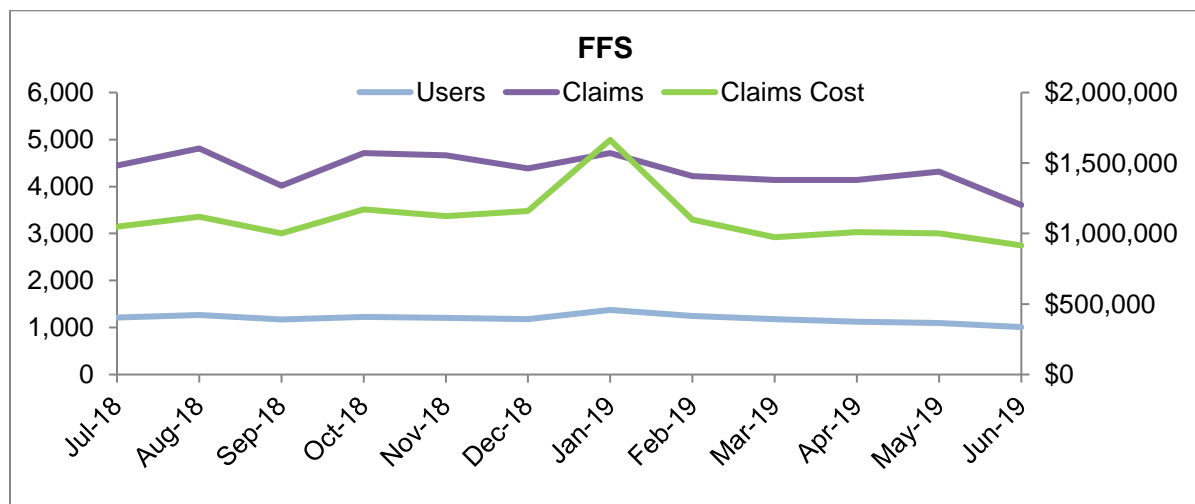


Figure 1: All FFS Users, Claims, and Claims Cost per Month for SFY 2019

In SFY 2019, there was marked spike in claims cost in January 2019. A review of claims data did not identify any specific high cost medication fills during this time. Claims cost elevations in January appear to be a trend in the data each year.

TXIX Program Totals

Figure 2 shows the number of users, claims, and claims cost for TXIX by month for SFY 2019.

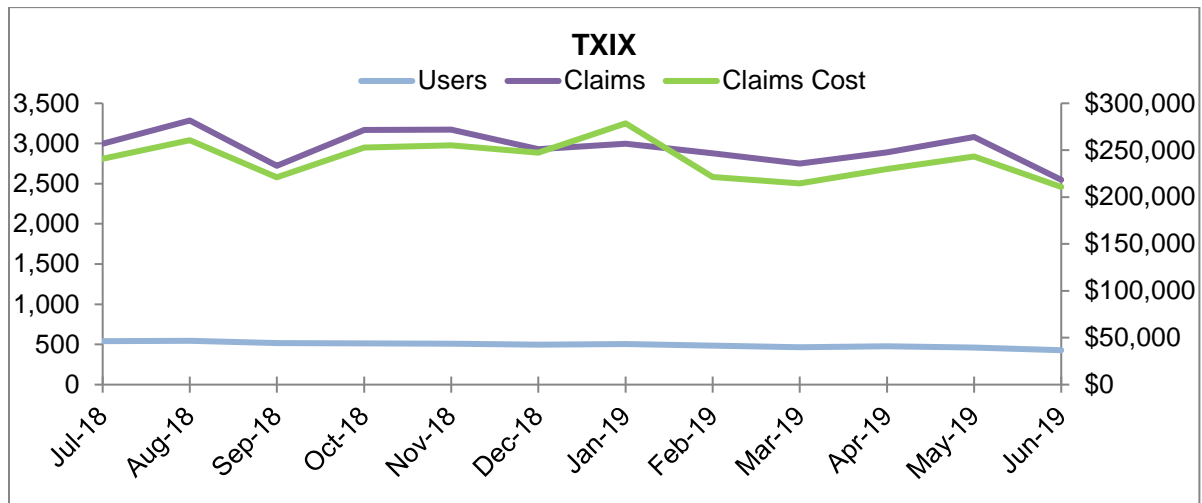


Figure 2: TXIX Users, Claims, and Claims Cost per Month for SFY 2019

For TXIX, the number of claims remained fairly steady during the SFY 2019 apart from a decrease in September 2018. Claims cost spiked in January 2019, largely attributed to an antihemophilic product. A beneficiary received 2 claims for the same medication during the month of January, at a cost of \$~42,000.

ADAPD Program Totals

Figure 3 shows the number of users, claims, and claims cost for ADAPD by month for SFY 2019.

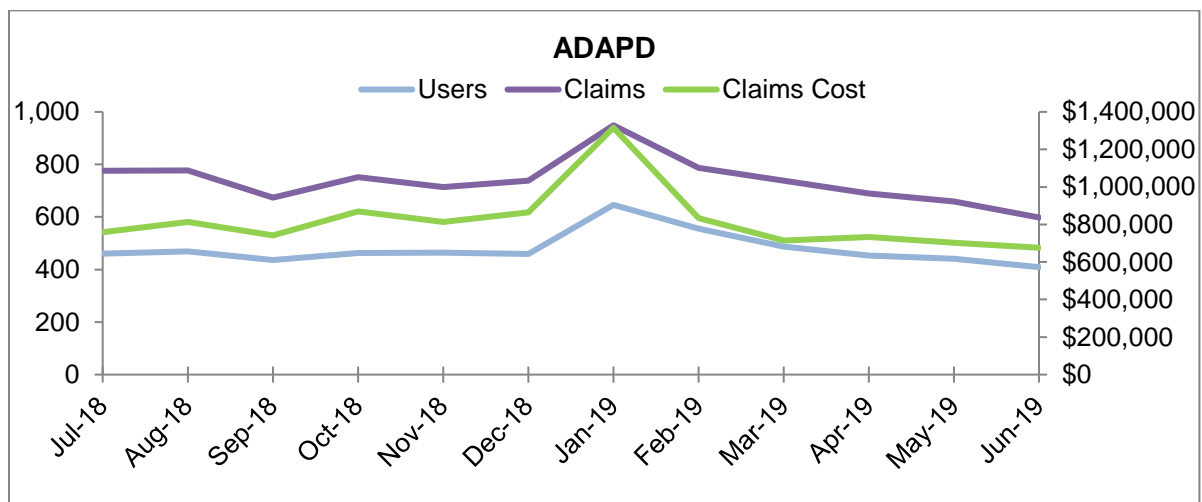


Figure 3: ADAPD Users, Claims, and Claims Cost per Month for SFY 2019

The number of users, claims, and claims cost were variable overall during SFY 2019. There was a sharp change in January 2019, when users, claims, and claims cost increased dramatically. This occurs each year.

MKN Program Totals

Figure 4 shows the number of users, claims, and claims cost for MKN by month for SFY 2019.

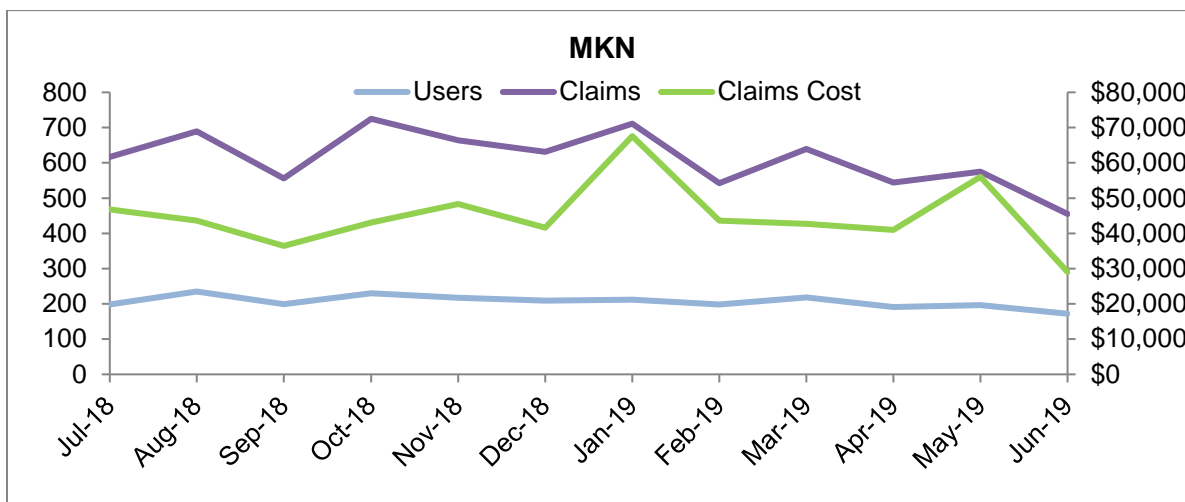


Figure 4: MKN Users, Claims, and Claims Cost per Month for SFY 2019

The number of users stayed steady during SFY 2019. The number of claims were variable and had a decline in September 2018 with a slow decline at the end of the SFY. Claims cost spiked during January and May of 2019. Based on claims data, the spike from May 2019 is partially attributed to a ~\$13,000 claim for Samsca. A review of claims data during January 2019 did not identify any specific high cost medication fills during this time.

Share of FFS Claims and Claims Cost

Figure 5 shows the share of FFS claims for ADAPD, TXIX, and MKN for SFY 2019.

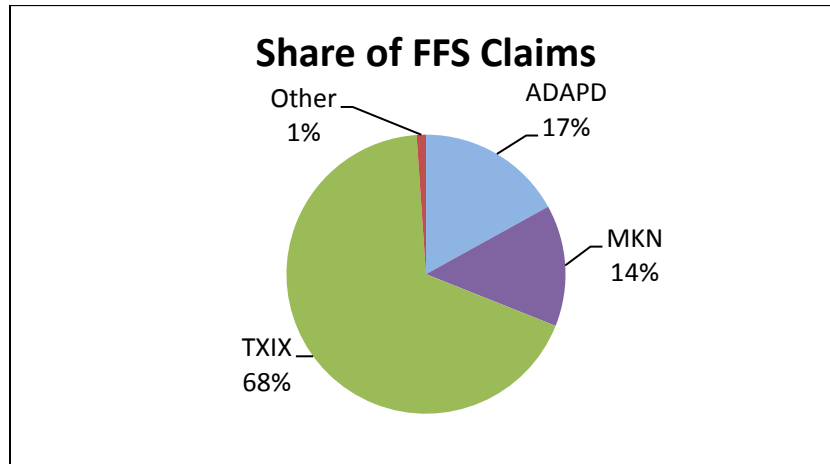


Figure 5: ADAPD, TXIX, and MKN Share of SFY 2019 FFS Claims

During SFY 2019, the TXIX program had 35,418 claims, which accounted for 68% of the 52,178 FFS claims paid. The MKN program accounted for 14%. The ADAPD program accounted for 17%. The remaining 1% of FFS claims come from other coverage plans in the FFS population.

Figure 6 shows the share of FFS claims cost for ADAPD, TXIX, and MKN for SFY 2019.

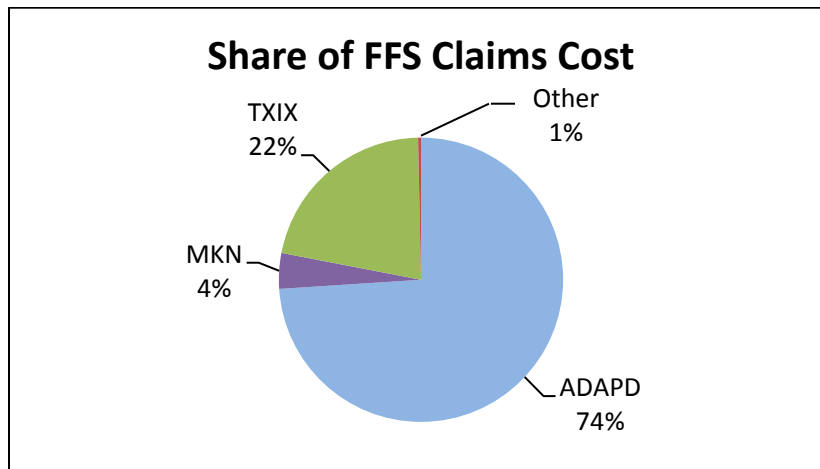


Figure 6: ADAPD, TXIX, and MKN Share of SFY 2019 FFS Claims Cost

While the ADAPD program only accounted for 17% of the claims paid for FFS, it accounted for 74% of the total claims cost. During SFY 2019, over \$13 million was paid for FFS claims, with almost \$10 million going toward ADAPD claims. The TXIX program accounted for 68% of the FFS claims paid but only 22% of the claims cost during SFY 2019. The MKN program accounted for 14% of the FFS claims and 4% of the claims cost during SFY 2018. The remaining (<1%) of FFS claims costs come from other coverage plans in the FFS population.

Comparison of Share of FFS Claims and Claims Cost Post-KanCare

Below are graphical representations of share of claims and claims cost for the three main FFS programs from SFY 2014 through SFY 2019.

Figure 7 shows the share of FFS claims for ADAPD, TXIX, and MKN for SFY 2015, SFY 2016, SFY 2017, SFY 2018 and SFY 2019.

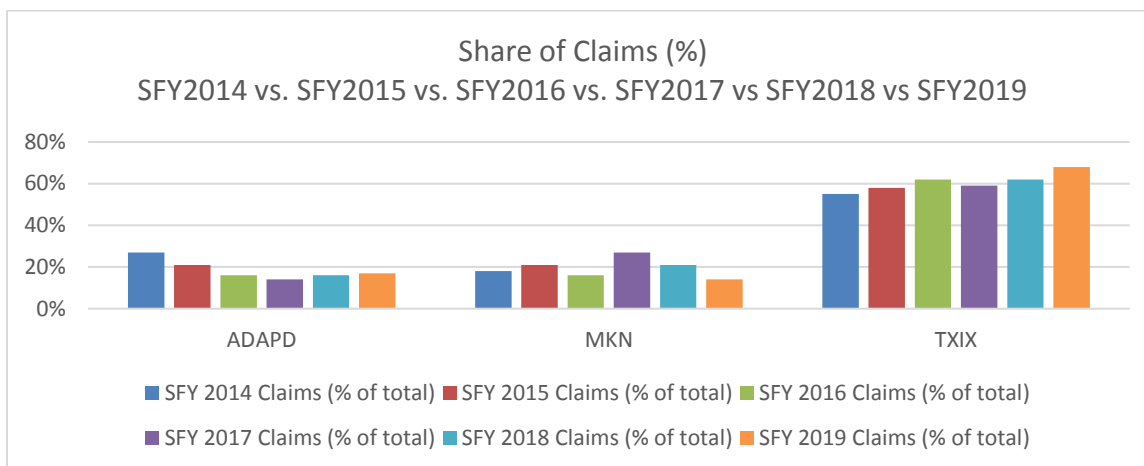


Figure 7: ADAPD, TXIX, and MKN Share of FFS Claims for SFY 2014 versus SFY 2015 versus SFY 2016 versus SFY 2017 versus SFY 2018 versus SFY 2019

The TXIX program continues to provide the highest number and percentage of claims for the FFS program. ADAPD claims increased slightly, while MKN claims decreased 33% compared to SFY 2018.

Figure 8 shows the share of claims cost of FFS claims for ADAPD, TXIX, and MKN for SFY 2015, SFY 2016, SFY 2017, SFY 2018 and SFY 2019.

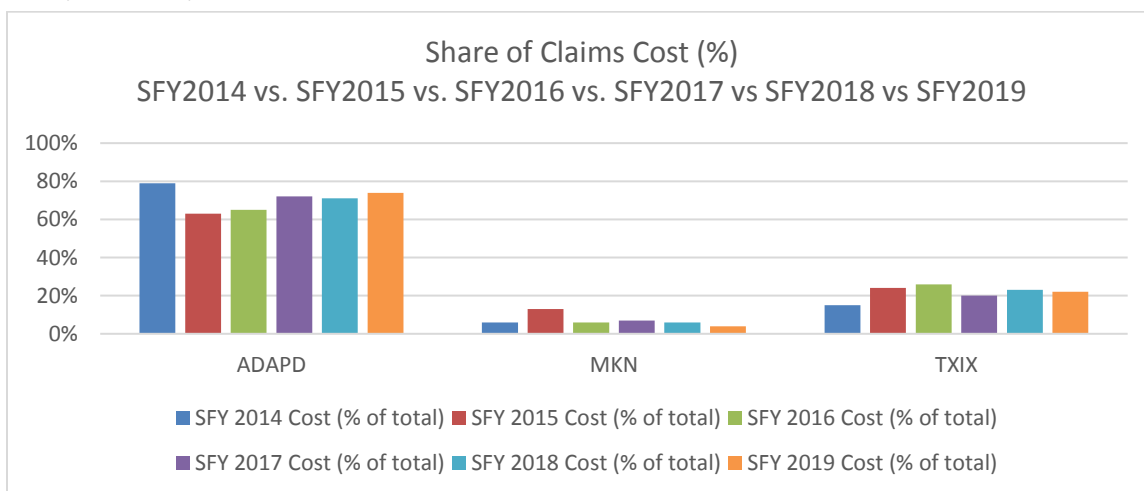


Figure 8: ADAPD, TXIX, and MKN Share of FFS Claims Cost for SFY 2014 versus SFY 2015 versus SFY 2016 versus SFY 2017 versus SFY 2018 versus SFY 2019

The ADAPD program continues to provide the highest percentage of claims cost for the FFS program. MKN and TXIX percentage of claims cost remain consistent from prior SFYs, with only small variations occurring.

Drug Classification Reporting

It is important not only to report the number of beneficiaries, number of claims, and claims cost by yearly and monthly totals but also to look at trends by therapeutic drug classes.

Therapeutic drug class reporting is based on the American Hospital Formulary Service (AHFS) Pharmacologic-Therapeutic Classification third hierarchy level. An example of the AHFS classification (for Central Nervous System Agents) is shown below. Reporting is done at the third hierarchy level (antipsychotics are provided as an example in the table below).

AHFS Pharmacologic-Therapeutic Classification Hierarchy Example	
28:00	Central Nervous System Agents
28:16	Psychotherapeutic Agents
28:16.08	Antipsychotics*
28:16.08.04	Atypical Antipsychotics
28:16.08.08	Butyrophenones
28:16.08.24	Phenothiazines
28:16.08.32	Thioxanthenes
28:16.08.92	Antipsychotics, Miscellaneous

*Therapeutic classes are reported at this level.

The number of claims and share of claims for the overall FFS population, as well as the sub-groups, are shown to identify differences in the programs. Likewise, the claims cost and share of claims cost for the different programs are shown to identify differences in program spend.

FFS Top Therapeutic Drug Classes

Table 2 reports the top 20 therapeutic drug classes by *number of claims* for the entire FFS population. See [Appendix A](#) for a list of drugs with utilization in SFY 2019 included in each class. The number of claims used to calculate the share of claims was 52,178.

AHFS Therapeutic Class	Claims	Share of Total Claims (%)	Beneficiaries	Cost/Claim
ANTIRETROVIRALS	7,655	14.67%	1,058	\$1,284
ANTIPSYCHOTIC AGENTS	5,510	10.56%	463	\$241
CATHARTICS AND LAXATIVES	4,715	9.04%	386	\$14
ANTIDEPRESSANTS	4,022	7.71%	627	\$14
ANTICONVULSANTS, MISCELLANEOUS	3,824	7.33%	418	\$48
SECOND GENERATION ANTIHISTAMINES	2,835	5.43%	338	\$12
NONSTEROIDAL ANTI-INFLAMMATORY AGENTS	1,107	2.12%	286	\$12
THYROID AGENTS	1,091	2.09%	152	\$19
ANTICHOLINERGIC AGENTS (CNS)	1,005	1.93%	103	\$16
BETA-ADRENERGIC BLOCKING AGENTS	990	1.90%	219	\$13
HMG-COA REDUCTASE INHIBITORS	990	1.90%	199	\$12
PROTON-PUMP INHIBITORS	832	1.59%	99	\$13
INSULINS	809	1.55%	96	\$364
BENZODIAZEPINES (ANTICONVULSANTS)	695	1.33%	117	\$78
BENZODIAZEPINES (ANXIOLYTIC, SEDATIV/HYP)	688	1.32%	119	\$17
ANGIOTENSIN-CONVERTING ENZYME INHIBITORS	667	1.28%	175	\$10
BIGUANIDES	642	1.23%	116	\$11
OPIATE AGONISTS	619	1.19%	117	\$27
ANXIOLYTICS, SEDATIVES, AND HYPNOTICS, MISC	518	0.99%	63	\$15
REPLACEMENT PREPARATIONS	516	0.99%	76	\$50

Table 2: Top 20 FFS Therapeutic Drug Classes Based on Number of Claims

Antiretrovirals made up the highest utilized drug class for the entire FFS population with 14.67% of all FFS claims, followed by antipsychotic agents with 10.56% of all FFS claims.

Antiretrovirals and antipsychotic utilization and expenditures remained steady throughout SFY 2019. Compared to SFY 2018, the top two classes remained the same based on number of claims.

Anxiolytics/sedatives/hypnotics/miscellaneous and replacement preparations are new to the list for the current fiscal year.

Table 3 reports the top 5 therapeutic drug classes and highest utilized medication by number of claims for the entire FFS population.

	Claims Cost	Number of Claims	Beneficiaries	Share of Total Number of Claims (%)
ANTIRETROVIRALS				
Biktarvy	\$2,999,514	1,653	379	3.17%
Genvoya	\$2,122,173	1,364	248	2.61%
ANTIPSYCHOTIC AGENTS				
Quetiapine	\$16,942	1,061	148	2.03%
Risperidone	\$147,355	977	88	1.87%
CATHARTICS AND LAXATIVES				
Docusate	\$30,006	2,606	240	4.99%
ANTIDEPRESSANTS				
Trazodone	\$14,722	1,266	248	2.43%
ANTICONVULSANTS, MISCELLANEOUS				
Divalproex	\$31,528	1,457	126	2.79%

Table 3: Top agents in the top 5 FFS Therapeutic Drug Classes Based on Number of Claims

Antiretrovirals are responsible for the most claims, as a class. Biktarvy and Genvoya are, overwhelmingly, the most prevalent agents. The next most utilized medication in this class is below half of the number of Biktarvy and Genvoya. As you will notice below, these two agents also account for the total claims cost from this class, which is expected (refer to table 6).

Of the antipsychotic agents, quetiapine and risperidone are the most prescribed medications. Neither, however, account for the highest costing medications (refer to table 6).

Expectantly, docusate accounts for the most written prescriptions for the use of laxatives.

Trazodone is the highest utilized antidepressant and contributes the highest to the total cost in the antidepressant class (refer to table 6).

Divalproex is the highest utilized anticonvulsant agent.

Table 4 reports the top 20 therapeutic drug classes by *claims cost* for the entire FFS population. The claims cost used to calculate the share of claims cost was \$13,284,851.

AHFS Therapeutic Class	Claims Cost	Share of Total Claims Cost (%)	Beneficiaries	Cost/Claim
ANTIRETROVIRALS	\$9,830,833	74.00%	1,058	\$1,284
ANTIPSYCHOTIC AGENTS	\$1,330,036	10.01%	463	\$241
HEMOSTATICS	\$541,782	4.08%	1	\$41,676
INSULINS	\$294,560	2.22%	96	\$364
ANTICONVULSANTS, MISCELLANEOUS	\$185,138	1.39%	418	\$48
CORTICOSTEROIDS (RESPIRATORY TRACT)	\$76,494	0.58%	62	\$328
ANTIMUSCARINICS/ANTISPASMODICS	\$65,593	0.49%	73	\$146
CATHARTICS AND LAXATIVES	\$64,074	0.48%	386	\$14
ANTIDEPRESSANTS	\$57,061	0.43%	627	\$14
BENZODIAZEPINES (ANTICONVULSANTS)	\$54,404	0.41%	117	\$78
DIPEPTIDYL PEPTIDASE-4 (DPP-4) INHIBITORS	\$37,177	0.28%	14	\$379
SECOND GENERATION ANTIHISTAMINES	\$35,422	0.27%	338	\$12
ANTICOAGULANTS	\$33,667	0.25%	34	\$183
DISEASE-MODIFYING ANTIRHEUMATIC AGENTS	\$33,301	0.25%	1	\$4,757
BETA-ADRENERGIC AGONISTS	\$28,867	0.22%	135	\$81
IMMUNOMODULATORY AGENTS	\$26,982	0.20%	1	\$6,746
REPLACEMENT PREPARATIONS	\$25,674	0.19%	76	\$50
THYROID AGENTS	\$20,949	0.16%	152	\$19
ANTIEMETICS, MISCELLANEOUS	\$20,112	0.15%	34	\$201
ANTIMUSCARINICS	\$19,263	0.14%	21	\$86

Table 4: Top 20 FFS Therapeutic Drug Classes Based on Claims Cost

Antiretrovirals made up the drug class with the highest cost for the entire FFS population with 74% of all FFS claims cost, followed by antipsychotic agents with 10.01% of all FFS claims cost.

New therapies on this list for SFY 2019 are replacement preparations, antiemetics miscellaneous, and antimuscarinics.

Table 5 reports the top 20 therapeutic drug classes by claims cost for the entire FFS population in comparison with the previous SFY.

AHFS Therapeutic Class	Claims Cost	Share of Total Claims Cost (%)	Beneficiaries	Cost/Claim	Claims Cost	Share of Total Claims Cost (%)	Beneficiaries	Cost/Claim	% Change Cost/Claim
	2018				2019				
ANTIRETROVIRALS	\$9,096,995	70.01%	1,010	\$1,122	\$9,830,833	74.00%	1,058	\$1,284	14.44%
ANTIPSYCHOTIC AGENTS	\$1,508,508	11.61%	543	\$246	\$1,330,036	10.01%	463	\$241	-2.03%
HEMOSTATICS	\$488,648	3.76%	1	\$54,294	\$541,782	4.08%	1	\$41,676	-23.24%
INSULINS	\$322,930	2.49%	115	\$382	\$294,560	2.22%	96	\$364	-4.71%
ANTICONVULSANTS, MISCELLANEOUS	\$133,963	1.03%	425	\$33	\$185,138	1.39%	418	\$48	45.45%
CORTICOSTEROIDS (RESPIRATORY TRACT)	\$114,432	0.88%	71	\$333	\$76,494	0.58%	62	\$328	-1.50%
ANTIMUSCARINICS/ ANTISPASMODICS	\$73,388	0.56%	73	\$186	\$65,593	0.49%	73	\$146	-21.51%
CATHARTICS AND LAXATIVES	\$61,303	0.47%	267	\$14	\$64,074	0.48%	386	\$14	0%
ANTIDEPRESSANTS	\$74,803	0.58%	790	\$15	\$57,061	0.43%	627	\$14	-6.67%
BENZODIAZEPINES (ANTICONVULSANTS)	\$88,837	0.68%	139	\$110	\$54,404	0.41%	117	\$78	-29.09%
DIPEPTIDYL PEPTIDASE-4 (DPP-4) INHIBITORS	\$23,391	0.18%	7	\$477	\$37,177	0.28%	14	\$379	-20.55%
SECOND GENERATION ANTIHISTAMINES	\$36,270	0.28%	240	\$12	\$35,422	0.27%	338	\$12	0%
ANTICOAGULANTS	\$27,300	0.21%	38	\$184	\$33,667	0.25%	34	\$183	-0.54%
DISEASE-MODIFYING ANTIRHEUMATIC AGENTS	\$63,304	0.49%	1	\$4,522	\$33,301	0.25%	1	\$4,757	5.20%
BETA-ADRENERGIC AGONISTS	\$28,242	0.22%	189	\$61	\$28,867	0.22%	135	\$81	32.79%
IMMUNOMODULATORY AGENTS	\$42,910	0.33%	3	\$7,152	\$26,982	0.20%	1	\$6,746	-5.68%
REPLACEMENT PREPARATIONS					\$25,674	0.19%	76	\$50	
THYROID AGENTS	\$21,489	0.17%	165	\$18	\$20,949	0.16%	152	\$19	5.56%
ANTIEMETICS, MISCELLANEOUS					\$20,112	0.15%	34	\$201	
ANTIMUSCARINICS					\$19,263	0.14%	21	\$86	
ANTIMALARIALS	\$142,557	1.10%	16	\$3,240					
ANTITOXINS AND IMMUNE GLOBULINS	\$57,037	0.44%	1	\$4,074					
ANTIBACTERIALS, MISCELLANEOUS	\$38,554	0.30%	82	\$279					

Table 5: Top 20 FFS Therapeutic Drug Classes Based on Number of Claims

Table 6 reports the top 5 therapeutic drug classes and most expensive medication by claims cost for the entire FFS population.

	Claims Cost	Number of Claims	Beneficiaries	Share of Total Claims Cost (%)
ANTIRETROVIRALS				
Biktarvy	\$2,999,514	1,653	379	22.58%
Genvoya	\$2,122,173	1,364	248	15.97%
ANTIPSYCHOTIC AGENTS				
Paliperidone	\$484,505	431	86	3.65%
HEMOSTATICS				
Hemlibra	\$541,782	13	1	4.08%
INSULINS				
Novolog	\$155,255	312	68	1.17%
ANTICONVULSANTS, MISCELLANEOUS				
Vimpat	\$48,903	69	12	0.37%

Table 6: Top agents in the top 5 FFS Therapeutic Drug Classes Based on Claims Cost

As mentioned above, Biktarvy and Genvoya are the most commonly prescribed agents. These two agents account for a total of 38% of the total claims cost for the entire FFS population.

Paliperidone had a total of 431 claims and was the highest costing antipsychotic. As compared to the highest utilized quetiapine and risperidone, paliperidone had 59% and 55% less claims, respectively.

One beneficiary requiring the use of Hemlibra resulted in 4.08% of the total claims cost for the entire FFS population.

Novolog accounts for the second highest utilized insulin, only 2% less claims than Lantus, but is 88% higher for total cost. Lantus had 319 total claims and \$83,232 total cost.

At 69 claims, Vimpat is the tenth highest anticonvulsant for total number of claims. However, it renders the most total cost within this class.

ADAPD Top Therapeutic Drug Classes

Table 7 reports the top five therapeutic drug classes by number of claims for the ADAPD population based on number of claims for SFY 2019. The number of claims used to calculate the share of claims was 8,851.

AHFS Therapeutic Class	Claims	Share of Total ADAPD Claims (%)	Beneficiaries	Cost/Claim
ANTIRETROVIRALS	7,611	86.00%	1,057	\$1,284
SULFONAMIDES (SYSTEMIC)	357	4.03%	110	\$14
NUCLEOSIDES AND NUCLEOTIDES	155	1.75%	45	\$74
ANTIDEPRESSANTS	144	1.63%	39	\$13
MACROLIDES	132	1.49%	62	\$20

Table 7: Top 5 ADAPD Therapeutic Drug Classes Based on Number of Claims

The top 5 AHFS classes by claims remained the same as it was in SFY 2018, which is to be expected based on the patient population.

Table 8 reports the top five therapeutic drug classes by claims cost for the ADAPD population. The claims cost used to calculate the share of claims cost was \$9,840,336.

AHFS Therapeutic Class	Claims Cost	Share of Total ADAPD Claims Cost (%)	Beneficiaries	Cost/Claim
ANTIRETROVIRALS	\$9,775,423	99.34%	7,611	\$1,284
ANTIPROTOZOALS, MISCELLANEOUS	\$13,369	0.14%	38	\$352
ANTIEMETICS, MISCELLANEOUS	\$13,067	0.13%	65	\$201
NUCLEOSIDE AND NUCLEOTIDE ANTIVIRALS	\$11,482	0.12%	155	\$74
AZOLE ANTIFUNGALS	\$8,417	0.09%	100	\$84

Table 8: Top 5 ADAPD Therapeutic Drug Classes Based on Claims Cost

Overall, 4 of the top 5 AHFS classes by claims cost remained the same as in SFY 2018, with antiemetics being new to the top 5 (replacing antiprotozoal). Antiretrovirals rank as the top utilized and most expensive drug class for ADAPD. Antiretrovirals made up 99.34% of the total claims cost and 86% of the total claims for the ADAPD.

TXIX Top Therapeutic Drug Classes

Table 9 reports the top five therapeutic drug classes by number of claims for the TXIX population based on number of claims for SFY 2019. The number of claims used to calculate the share of claims was 35,418.

AHFS Therapeutic Class	Claims	Share of Total TXIX Claims (%)	Beneficiaries	Cost/Claim
CATHARTICS AND LAXATIVES	4,686	13.23%	376	\$14
ANTIPSYCHOTIC AGENTS	4,665	13.17%	225	\$243
ANTICONVULSANTS, MISCELLANEOUS	3,019	8.52%	191	\$54
SECOND GENERATION ANTIHISTAMINES	2,806	7.92%	332	\$12
ANTIDEPRESSANTS	2,218	6.26%	194	\$17

Table 9: Top 5 TXIX Therapeutic Drug Classes Based on Number of Claims

The top 5 AHFS classes by claims remained the same as it was in SFY 2018.

Table 10 reports the top five therapeutic drug classes by claims cost for the TXIX population. The claims cost used to calculate the share of claims cost was \$2,876,137.

AHFS Therapeutic Class	Claims Cost	Share of Total TXIX Claims Cost (%)	Beneficiaries	Cost/Claim
ANTIPSYCHOTIC AGENTS	\$1,133,120	39.40%	225	\$243
HEMOSTATICS	\$541,782	18.84%	1	\$41,676
ANTICONVULSANTS, MISCELLANEOUS	\$161,614	5.62%	191	\$54
INSULINS	152,300	5.30%	43	\$364
CATHARTICS AND LAXATIVES	\$63,856	2.22%	376	\$14

Table 10: Top 5 TXIX Therapeutic Drug Classes Based on Claims Cost

Overall, 4 of the top 5 AHFS classes by claims cost remained the same as in SFY 2018. For the TXIX program, antipsychotic agents made up 13.23% of claims and 39.4% of the claims cost. Historically, antipsychotic agents have always made up a large portion of drug expenditures. The cathartics and laxatives class is new to this list (replacing antiretrovirals).

MKN Top Therapeutic Drug Classes

Table 11 reports the top five therapeutic drug classes by number of claims for the MKN population based on number of claims for SFY 2019. The number of claims used to calculate the share of claims was 7,348.

AHFS Therapeutic Class	Claims	Share of Total MKN Claims (%)	Beneficiaries	Cost/Claim
ANTIDEPRESSANTS	1,642	22.34%	393	\$11
ANTIPSYCHOTIC AGENTS	841	11.46%	238	\$234
ANTICONVULSANTS, MISCELLANEOUS	777	10.57%	221	\$30
HMG-COA REDUCTASE INHIBITORS	282	3.84%	116	\$12
BETA-ADRENERGIC BLOCKING AGENTS	280	3.81%	128	\$13

Table 11: Top 5 MKN Therapeutic Drug Classes Based on Number of Claims

Antidepressant agents made up the highest number of claims at 22.34%, followed by antipsychotic agents at 11.46% of claims. All of the top 5 AHFS classes on this list remained the same as in SFY 2018.

Table 12 reports the top five therapeutic drug classes by claims cost for the MKN population. The claims cost used to calculate the share of claims cost was \$539,778.

AHFS Therapeutic Class	Claims Cost	Share of Total MKN Claims Cost (%)	Beneficiaries	Cost/Claim
ANTIPSYCHOTIC AGENTS	\$196,787	36.46%	238	\$234
INSULINS	\$138,041	25.57%	50	\$364
IMMUNOMODULATORY AGENTS	\$26,982	5.00%	1	\$6,746
ANTICONVULSANTS, MISCELLANEOUS	\$22,955	4.25%	221	\$30
ANTIDEPRESSANTS	\$17,502	3.24%	393	\$11

Table 12: Top 5 MKN Therapeutic Drug Classes Based on Claims Cost

Antipsychotic agents accounted for 36.46% of the claims cost for MKN for SFY 2019. Insulins were the second most expensive agent, based on cost per claim, for all MKN claims. Overall, 3 of the top 5 AHFS classes by claims cost remained the same as in SFY 2018, with anticonvulsants and antidepressants being back on the list after being absent during SFY 2018.

Trend Summary Analysis

In prior SFYs, cost savings could be directly seen by emergence of FDA-approved generically equivalent formulations of highly-utilized, costly medications (i.e., nevirapine in SFY 14 and aripiprazole in SFY 15 and SFY 16). SFY 17 and SFY 18 focused on the variable cost per claim per user.

Users on Concurrent Benzodiazepines and Opioids and Users on Concurrent Antipsychotics and Opioids Trend Summary

Unsettling rates of opioid misuse and addiction within the US have prompted regulatory bodies and government health care programs to implement various initiatives focused on curbing inappropriate drug use. The risks of excessive opioid utilization have also been compounded by concurrent prescribing and dispensing of benzodiazepines and antipsychotics.

Efforts to mitigate the risks of these potentially fatal drug combinations and promote evidence-based clinical decision making have taken center stage across the health care spectrum. Guided by federal policy, one initiative involves the distribution of educational pieces, warning providers of the serious risks of drug regimens containing multiple CNS depressants and opioid drug products. In parallel with these provider outreach programs, payer-led drug utilization reviews are also playing an important role in driving change and providing insights on prescribing patterns.

The following review of claims data assesses potentially inappropriate prescribing patterns among fee-for-service plan members.

Figure 9 shows users on concurrent benzodiazepines and opioids, antipsychotic and opioid, and antipsychotic and benzodiazepine and opioid.

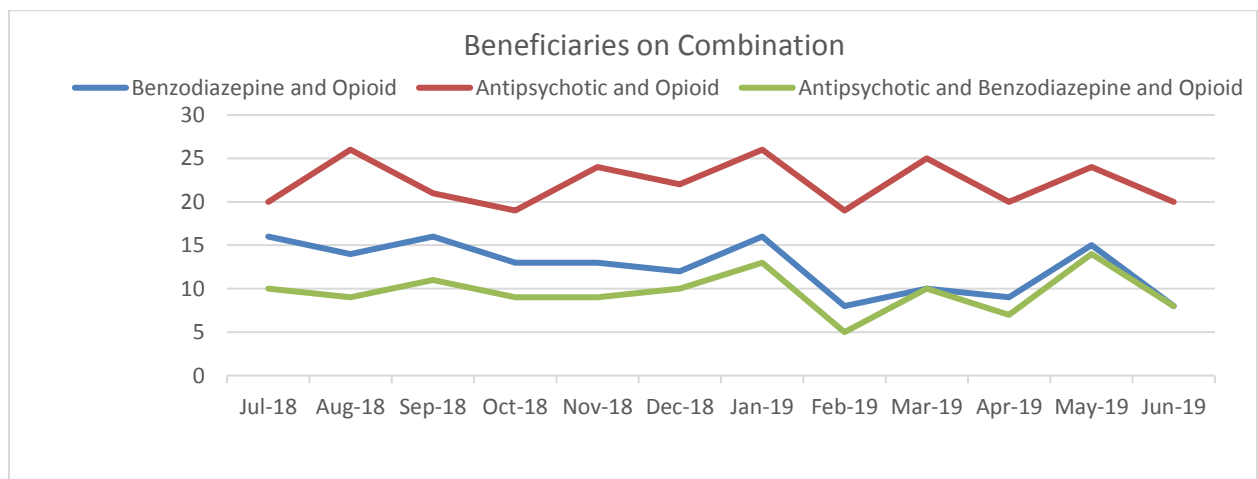


Figure 9: Users on combination therapy with benzodiazepines, opioids, and antipsychotics

Top 5 Costly Medications

Based on cost, the top 5 most expensive medications per claim include Hemlibra, Samsca, Invega Trinza, Tecfidera and Aubagio.

Table 13 shows the top 5 most expensive medications.

Medication Name	Number of Claims Per SFY2019	Total Claims Cost Per SFY2019	Cost/Claim
Hemlibra	13	\$541,782	\$41,676
Samsca	1	\$13,531	\$13,351
Tecfidera	1	\$7,373	\$7,373
Aubagio	3	\$19,609	\$6,536
Invega Trinza	5	\$32,424	\$6,485

Table 13: Top 5 Drugs Based on Medication Cost

Compared to table 6, these agents may not necessarily contribute the most to overall spending but still carry a significantly high cost per claim.

Hemlibra is a bispecific factor IXa- and factor X-directed antibody indicated for routine prophylaxis to prevent or reduce the frequency of bleeding episodes in adult and pediatric patients with hemophilia A (congenital factor VIII deficiency) with factor VIII inhibitors. It was FDA-approved in 2017 and there are no generics and/or biosimilars available currently.

Samsca is a selective vasopressin V2-receptor antagonist indicated for the treatment of clinically significant hyponatremia. It is an oral agent FDA-approved in 2009.

Tecfidera is an immunomodulator used in the treatment of multiple sclerosis (MS).

Aubagio is a pyrimidine synthesis inhibitor indicated for the treatment of MS.

Invega Trinza is an alternative to Invega Sustenna long-acting injectable antipsychotic. Invega Sustenna is injected monthly. Invega Trinza is injected every 3 months. A single dispensing of the medication can be almost \$8,000. The alternative monthly Invega Sustenna is approximately \$2,500. Comparing a 1-month administration and a 3-month administration, monthly prices are comparable.

Conclusion

The U.S. Food and Drug Administration (FDA) and Centers for Medicare and Medicaid Services (CMS) have issued warnings about the dangerous risk of death that can arise from the concurrent use of central nervous system (CNS) depressing agents. Although this has been previously addressed by the FDA, CMS is implementing a Medicaid Drug Utilization Review (DUR) provision for states to implement. As this is a clear concern, KMAP will be monitoring this combination and the current status is being presented.

During SFY 2019, overall utilization and expenditures increased for the FFS population from the previous SFY.

Between SFY 2018 and SFY 2019, the average cost per claim continued to increase. Although there was not a particular medication price increase identified for this change, there were new medications introduced into the market that accounted for increases in utilization to higher costing agents. The increased utilization of high cost agents within existing drug classes likely contributed to the overall increase in cost per claim for SFY 2019. The cost per claim for both the antiretrovirals and the anticonvulsants increased 14.44% and 46.45%, respectively, compared to the prior SFY.

Symtuza (darunavir ethanolate/cobicistat/emtricitabine/tenofovir alafenamide fumarate) was FDA-approved in July 2018 and is the most expensive single-prescription antiretroviral. Current utilization accounts for 3.4% and cost accounts for 6.65% of this class.

Briviact (brivaracetam) was FDA-approved in February 2016 and is the most expensive single-prescription anticonvulsant. Current utilization accounts for 0.36% and cost accounts for 14.27% of this class.

The average cost/claim continues to remain higher than pre-KanCare levels due to the majority of FFS claims cost being attributed to ADAPD and the program's select coverage and high-cost medications. Pre-KanCare, the majority of claims was attributed to TXIX, which covers a broad range of medications and medication costs.

Table 14 shows the FFS claims cost, number of claims, and average cost per claim per month for the past ten years.

Period Covered	Claims Cost	Claims	Average Cost/Claim
SFY 2019	\$13,284,851	52,178	\$254.60
SFY 2018	\$12,992,968	57,611	\$225.53
SFY 2017	\$10,391,867	52,518	\$197.87
SFY 2016	\$8,096,516	45,358	\$178.50
SFY 2015	\$9,911,032	47,098	\$210.43
SFY 2014	\$14,678,118	52,343	\$280.42
SFY 2013	\$90,994,439	1,110,050	\$81.97
SFY 2012	\$176,615,977	2,156,498	\$81.90
SFY 2011	\$172,298,691	2,177,286	\$79.13
SFY 2010	\$161,952,882	2,098,289	\$77.18

Table 14: Past Years' Totals

Appendix A – Drugs by Class*

Angiotensin-Converting

Enzyme Inhibitors

Benazepril
Benazepril/Hydrochlorothiazide
Lisinopril
Lisinopril/Hydrochlorothiazide
Quinapril
Ramipril

Anticholinergic Agents (CNS)

Benztropine
Trihexyphenidyl

Anticoagulants

Apixaban
Enoxaparin
Rivaroxaban
Warfarin

Anticonvulsants, Misc.

Brivaracetam
Carbamazepine
Divalproex
Eslicarbazepine
Felbamate
Gabapentin
Lacosamide
Lamotrigine
Levetiracetam
Oxcarbazepine
Pregabalin
Topiramate
Valproic Acid
Zonisamide

Antidepressants

Amitriptyline
Bupropion
Citalopram
Clomipramine
Desvenlafaxine
Doxepin
Duloxetine
Escitalopram
Fluoxetine
Fluvoxamine
Imipramine
Mirtazapine
Nortriptyline
Paroxetine
Sertraline
Trazodone
Venlafaxine
Vilazodone
Vortioxetine

Antiemetics, Misc.

Dronabinol
Scopolamine

Antimuscarinics/

Antispasmodics

Dicyclomine
Glycopyrrolate
Glycopyrrolate/Formoterol
Hyoscyamine
Ipratropium
Ipratropium/Albuterol
Tiotropium

Antimuscarinics

Fesoterodine
Oxybutynin
Solifenacin

Antiprotozoals, Misc.

Atovaquone
Metronidazole

Antipsychotic Agents

Aripiprazole
Asenapine
Brexpiprazole
Cariprazine
Chlorpromazine
Clozapine
Fluphenazine
Haloperidol
Iloperidone
Loxapine
Lurasidone
Olanzapine
Paliperidone
Perphenazine
Quetiapine
Risperidone
Thioridazine
Thiothixene
Trifluoperazine
Ziprasidone

Antiretrovirals

Abacavir
Abacavir/Lamivudine
Abacavir/Dolutegravir/Lamivudine
Atazanavir
Atazanavir/Cobicistat
Bictegravir/Emtricitabine/
Tenofovir
Darunavir/Cobicistat
Darunavir/Cobicistat/Emtricitabin
e/Tenofovir

Dolutegravir
Dolutegravir/Rilpivirine
Dolutegravir/Lamivudine
Doravirine
Doravirine/Lamivudine/Tenofovir
Efavirenz
Efavirenz/Emtricitabine/Tenofovir
Efavirenz/Lamivudine/Tenofovir
Elvitegravir/Cobicistat/
Emtricitabine/Tenofovir
Emtricitabine
Emtricitabine/Rilpivirine/Tenofovir
Emtricitabine/Tenofovir
Etravirine
Fosamprenavir
Lamivudine
Lopinavir/Ritonavir
Maraviroc
Nelfinavir
Nevirapine
Raltegravir
Rilpivirine
Ritonavir
Tenofovir
Zidovudine

Anxiolytics, Sedatives, and Hypnotics, Misc.

Buspirone
Hydroxyzine
Ramelteon
Zaleplon
Zolpidem

Azole Antifungals

Fluconazole
Itraconazole

Benzodiazepines (Anticonvulsants)

Clobazam
Clonazepam

Benzodiazepines (Anxiolytic, Sedatives & Hypnotics)

Alprazolam
Clorazepate
Diazepam
Lorazepam
Temazepam

Beta-Adrenergic Agonists

Albuterol
Arformoterol
Levalbuterol
Salmeterol

Beta-Adrenergic Blocking Agents

Atenolol
Bisoprolol/Hydrochlorothiazide
Carvedilol
Labetalol
Metoprolol
Propranolol
Sotalol

Biguanides

Metformin

Cathartics and Laxatives

Bisacodyl
Calcium Polycarbophil
Docusate
Lubiprostone
Magnesium Citrate
Magnesium Hydroxide
Methylcellulose
Polyethylene Glycol 3350
Psyllium
Sennosides
Sennosides/Docusate

Corticosteroids (Respiratory Tract)

Beclomethasone
Budesonide
Budesonide/Formoterol
Fluticasone
Fluticasone/Salmeterol
Fluticasone/Vilanterol
Mometasone
Mometasone/Formoterol

Dipeptidyl Peptidase-4 (DDP-4) Inhibitors

Saxagliptin
Sitagliptin

Disease-Modifying Antirheumatic Agents

Adalimumab

Hemostatics

Emicizumab-kxwh

HMG-CoA Reductase Inhibitors

Atorvastatin
Lovastatin
Pravastatin
Rosuvastatin
Simvastatin

Immunomodulatory Agents

Dimethyl Fumarate
Teriflunomide

Insulins

Insulin Detemir
Insulin Glargine
Insulin Lispro
Insulin NPH

Insulin Regular

Macrolide Antibiotics

Azithromycin
Clarithromycin
Erythromycin

Nonsteroidal Anti-Inflammatory Agents

Aspirin
Diclofenac
Ibuprofen
Indomethacin
Ketorolac

Nabumetone
Naproxen
Sulindac

Nucleosides and Nucleotides

Acyclovir
Tenofovir
Valacyclovir
Valganciclovir

Opiate Agonists

Acetaminophen/Codeine
Hydrocodone/Acetaminophen
Hydrocodone/Ibuprofen
Hydromorphone
Methadone
Morphine
Oxycodone
Oxycodone/Acetaminophen
Tramadol

Proton-Pump Inhibitors

Dexlansoprazole
Esomeprazole
Omeprazole
Pantoprazole

Replacement Preparations

Potassium

Second Generation

Antihistamines

Loratadine

Sulfonamides (systemic)

Sulfadiazine
Sulfamethoxazole/Trimethoprim
Sulfasalazine

Thyroid Agents

Levothyroxine
Thyroid, desiccated

* This list only includes agents with claims during SFY 2019.